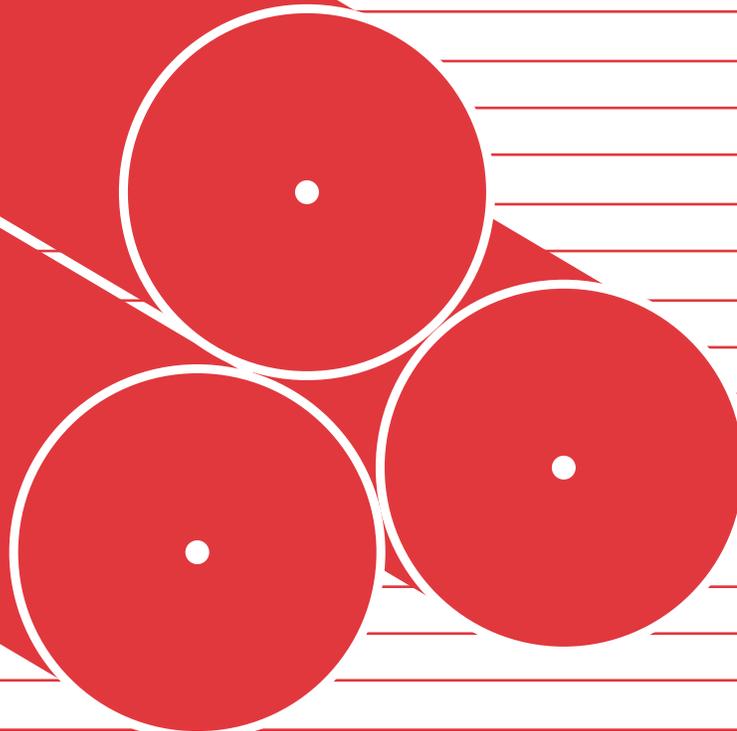


# **UNION TOOL ROLLER COATERS AND AUTOMATIC EQUIPMENT HANDLING SYSTEMS**

For Controlled Application of Liquid  
Coatings Onto All Flat Materials



**The Union Tool Corporation**



# UNION TOOL ROLLER COATERS IMPROVE EFFICIENCY BY RAPIDLY APPLYING CONTROLLED LIQUID COATINGS ONTO ANY FLAT MATERIAL

Save up to 50% on coating materials. Improve efficiency. Reduce maintenance costs. These are just some of the ways you can benefit by installing Union Tool roller coaters in your plant.

Union Tool roller coaters are engineered to accurately apply

controlled liquid coatings onto any flat material. Any fluid substance—such as glue, resinous adhesives, drawing compound, latex, wax, oil, plastic, paint or varnish—can be applied to any flat material, including metals, veneers, plywood, fabrics, paper, cardboard, rubber, plastics, glass, hardboard, cork and others.

Union Tool can also custom design roller coaters for experimental work, light-duty performance, or heavy-duty major production. Through custom engineering, we match your exact requirements with equipment that is adaptable to meet any coating need, including continuous strip, intermittent or piece applications.

## ROLL CONFIGURATIONS

The roll configurations shown are representative of the most common methods of roller coating used in the industry today. Double side coaters, such as Models A and B, apply coating from the top and bottom rolls to both sides of the material (but can be used as single top or bottom coaters). Single side coaters, such as Models C and D, apply coating from the top or bottom of the rolls onto only one side of the material.

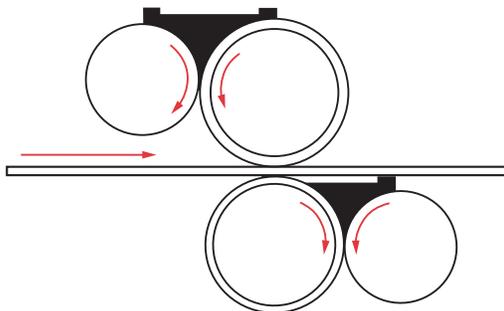
The liquid coating in Model A is held in the crotch or trough formed by the coating and doctor roll. As the rolls rotate, the material is metered through and a controlled amount of coating is applied to both sides.

Coating material for the top coating roll in Model B is held in the trough or crotch formed by the coating and doctor rolls. The bottom roll receives the coating material from the pan in which it runs through.

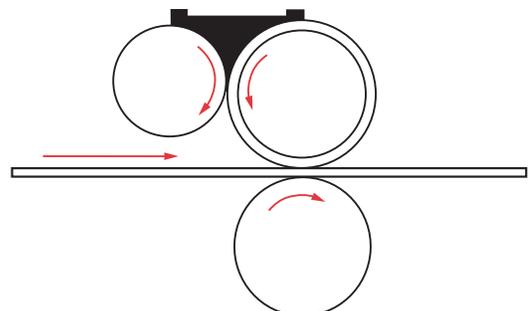
The coating material for Model C is held in the top crotch or trough and will coat the top side only.

In Model D the coating material is held in a lower pan in which the roll runs through.

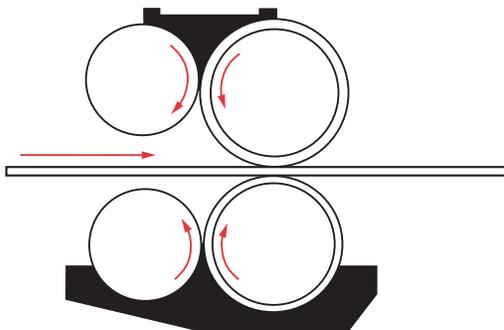
A wide variety of roll coverings are available, including: Neoprene, gelatin, Thiokol, Urethane and plated steel. The rolls are usually smooth ground but can be corrugated depending on the type of material used for coating and the amount to be applied.



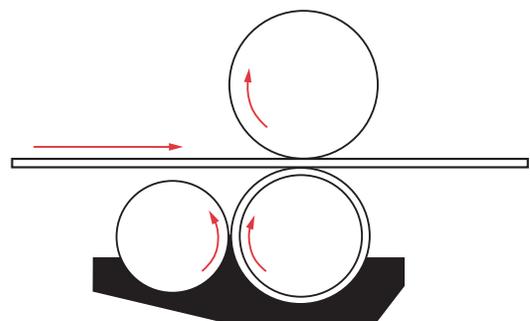
**Double Coater - Model A**



**Single Top Coater - Model C**



**Double Coater - Model B**



**Single Bottom Coater - Model D**



## FOUR STANDARD SIZES

Union Tool offers four standard series of roller coaters, each in four standard models based on the type of rolls and their various positions. The model letter (A, B, C, D) represents the roll configuration available while the series number (5, 15, 45, 65) stands for the size of the diameter of the roll. From these units, Union Tool builds custom coaters designed to match the requirements of specific applications.

## STANDARD CONSTRUCTION FEATURES:

### Rigid Steel Frames

Series 5 and 15 machines have heavy tubular steel frames for lifetime rigidity. Series 45 and 65 have extra-heavy-duty welded steel frames. All motors, gear reducers and variable speed drives are housed within the frames of the coaters, conserving valuable space while providing maximum protection.

### Shielded Components

Union Tool roller coaters are equipped with a positive chain drive that is fully shielded from the crotch of the rolls, eliminating contamination of the driving mechanism. All Union Tool roller coaters are simple in design, which makes each unit easy to clean and operator friendly. This type of construction allows for fast removal of the rolls and maintenance.

### Optional Equipment

Union Tool offers many "optional" add on equipment to compliment our roller coaters. Some of the optional equipment offered include: Air/Mechanical pumping units, recirculating pumping units, casters, explosion-proof electricals, infeed and offbearing conveyors, and much more.

## Series 5 Roller Coater

The Series 5 coating roll diameter is 4". Doctor roll diameter is 2<sup>3</sup>/<sub>4</sub>". Rolls are mounted in self-aligning ball bearings. Standard machines have smooth ground coating rolls and are equipped with a 1/2 HP dual-voltage variable speed motor. Roll openings are adjustable to accommodate material thicknesses from 0" to 4":



Series 5 roller Coater

## Series 15 Roller Coater

The Series 15 coating roll diameter is 6<sup>1</sup>/<sub>2</sub>". Doctor roll diameter is 4<sup>3</sup>/<sub>8</sub>". All rolls are spring-loaded and easily cleaned. Standard machines are equipped with a 1HP dual-voltage motor, 24V controls, variable speed, infeeding support table, and offbearing fingers. These coaters are available in any width from 12" to 65".



Series 15 Roller Coater

## Series 45 Roller Coater

The Series 45 coating roll diameter is 8<sup>3</sup>/<sub>4</sub>". Doctor roll diameter is 6<sup>1</sup>/<sub>2</sub>". Rolls are mounted in self-aligning ball bearings, and available in any width from 12" to 98". A single handwheel adjustment controls the upper roll assembly with openings from 0" to 4". Standard roll coverings include Thiokol, Neoprene or chrome plated steel. A 2 HP dual-voltage motor with 24V controls, variable speed, infeeding support table, and offbearing fingers are also included.



Series 45 Roller Coater

## Series 65 Roller Coater

The Series 65 is available in any roll width from 60" to 168" with extra-heavy-duty electrically welded steel plate housings for maximum duty. Diameter of the coating roll is 12<sup>3</sup>/<sub>4</sub>". Doctor roll diameter is 7<sup>1</sup>/<sub>2</sub>". Anti-friction bearings are sealed and self-aligning. A single handwheel adjustment controls the upper roll assembly with openings from 0" to 4". A 3 to 5 HP dual-voltage motor with 24V controls is also standard.

**NOTE:** Guards are removed on certain pictures for illustrative purposes only.



## HOT MELT ROLLER COATERS:

One of Union Tool's most popular types of roller coater is our hot melt coater. These roller coaters are used for the application of hot melt coatings such as wax, lubricants, contact adhesives, PUR adhesives, pressure sensitive adhesives, or virtually any coating material that requires heat. Our rolls are heated by hot oil, which is circulated through the rolls by a special pump.

Union Tool offers three standard series of hot melt roller coaters, each in two standard models based on the type of rolls and their various positions. The model letter (A, C) represents the roll configuration available while the series number (5, 15, 45, 65) stands for the size of the diameter of the roll.

## STANDARD CONSTRUCTION FEATURES:

### Roll Construction

We construct our rolls with a special roll within a roll design. The purpose of this is to recirculate the hot oil around the dummy roll, which is welded on the inside of the roll tube itself, instead of filling the entire roll with hot oil. This provides for more even heat and allows us to use a lower KW heater.

### Heated Rolls

All doctor rolls and coating rolls are heated. Heating the coatings rolls allows us to maintain a more controlled temperature and compensate for the heat loss which naturally occurs while coating various substrates. Heat loss on the coating roll will cause a variation in coating weights and force the user to apply heavier amount of hot melt coating.

### Components

Union Tool hot melt roller coaters included many user friendly components such as: spring loaded teflon Seal Plates, high temperature bearings, hot oil heater and pump unit, hot oil rotary unions, simplified plumbing layout, and much more.

### Series 5 Hot Melt Roller Coater

The Series 5 hot melt coating roll diameter is 4-1/2". Doctor roll diameter is 3-5/8". Standard machines are equipped with single hand-wheel control, unifeed hand-wheel adjustment, mechanical digital indicators, a 1HP dual-voltage motor, 24 volt controls, variable speed drive and much more.



Series 5 Hot Melt Roller Coater

### Series 15 Hot Melt Roller Coater

The Series 15 hot melt coating roll diameter is 6-1/2". Doctor roll diameter is 4-7/8". These coaters are available in any width from 12" to 54". Standard machines are equipped with a 2HP dual-voltage motor, 24V controls, variable speed, single hand-wheel control, unifeed hand-wheel adjustment, mechanical digital indicators, and more.



Series 15 Hot Melt Roller Coater

### Series 45 Hot Melt Roller Coater

The Series 45 hot melt coating roll diameter is 8-3/4". Doctor roll diameter is 6-55/88". These coaters are available in any width from 12" to 98". A single handwheel adjustment controls the upper roll assembly with openings from 0" to 4". Standard machine is equipped with a 3 HP dual-voltage motor with 24V controls, variable speed, infeed and outfeed support table, and include all other standard features listed on our series 5 and 15 machines.

### Series 65 Hot Melt Roller Coater

The Series 65 is really big hot melt roller coater that is available in widths from 110" to 168". The Diameter of the coating roll is 14". Doctor roll diameter is 12". This machine includes a 5 HP dual-voltage motor with 24V controls and a 90 KW Heater. Other standard features that are included on the series 5, 15, and 45 are also included on our series 65.



Series 65 Hot Melt Roller Coater

**NOTE:** Guards are removed on certain pictures for illustrative purposes only.



## UNION TOOL LAMINATORS:

Union Tool also specializes in the design and manufacturing of different types of rotary laminators, also known as pinch roll machines. These machines are used to exert bonding pressure to laminate two flat panel substrates or web materials together. Union tool laminators are available up to 120" wide and can be configured as a single nip machine, or a multi-nip machine.

## STANDARD CONSTRUCTION FEATURES:

### Ridged Steel Frames

All rotary laminator machines have extra heavy duty tubular steel frames for lifetime rigidity. All motors, gear reducers and variable speed drives are housed within the frames of the laminators conserving valuable space while providing maximum protection.

### Rolls

All lamination rolls are covered with mechanical neoprene rubber. Depending on the series and size of the machine, the diameter of these rolls can vary.

### Components

Union Tool rotary laminators included many user friendly components such as: single hand-wheel control, mechanical digital indicators, self aligning bearings, variable speed motor with 24 volt controls, and much more.

## Single Nip Rotary Laminator

Our Series 15 Single Nip Rotary Laminator incorporates two 6-1/2" diameter rolls with a 1" rubber covering. Both rolls are chain driven through a 1/2 HP variable speed motor. The upper roll is adjustable in relationship to the bottom roll in a range of 0-4".



Single Nip Rotary Laminator

## Multi-Nip Rotary Laminator

Union Tool offers a Multi-nip Rotary Laminator that includes multiple sets of "nip" rolls, rather than a single set. utilizing a series of nip rolls, the laminating panel will be under pressure for a longer period of time and can have various amounts of pressure using different sections of the machine. We build this machine in a three (3) set, five (5) set, and ten (10) set of rolls machines.



Multi-Nip Rotary Laminator with Unwind

## SPECIAL LAMINATORS

For the application of laminating adhesive backed films, foils, paper, etc. the Union Tool Corporation has designed a Hot Roll Laminator machine. This type of lamination is achieved by passing different substrate materials (foam/wood/metal/etc.) and rolled secondary material (films, foils, paper) through a set of heated teflon-coated rolls. The secondary material already has a heat re-activated adhesive backing which requires a certain amount of temperature and pressure to laminate. Once sent through the heated rolls, this re-activates the adhesive and fuses the secondary material to the top-side and/or bottom-side of the substrate material. This machine includes two (2) unwind stand units.



Hot Roll Laminator Infeed View



Hot Roll Laminator Outfeed View

**NOTE:** Guards are removed on certain pictures for illustrative purposes only.



## FEEDING MACHINES:

Many full line manufacturing processes require feeding machines, or also known as de-stacking machines, to help improve efficiency and increase overall productivity. Over the years, the Union Tool Corporation has designed a variety of different types of sheet feeder units that can be used in multiple different industries.

### Steel Plate Feeder

This is a very large feeder for steel sheets and plates that can de-stack and feed sheets from 24" x 24" x 16 gauge up to 72" x 240". This unit includes a 30,000 pound hydraulic lift table and has a feed rate up to 6 cycles per minute.



**Steel Plate Feeder**



**Sheet Foam Feeder**

### Sheet Foam Feeder

The programmable Union Tool Sheet Foam Feeder simplifies and automates the process of de-stacking foam sheets and feeding them one at a time to a conveyor. This machine can handle foam sheets 4 feet wide and up to 16 feet long, at continuous line feed speeds up to 100 feet per minute.

### Metal Sheet Vacuum Feeder

The Metal Sheet Vacuum Feeder feeds metal sheets one at a time from an integrated lift table carrying a stack of sheets weighing as much as a ton. The lift table indexes the sheet stack to a certain pass line height, magnetic sheet fanners separate each sheet, and vacuum cups transfer the sheets to a conveyor.



**Metal Sheet Vacuum Feeder**

**NOTE:** Guards are removed on certain pictures for illustrative purposes only.

## STACKING MACHINES:

On the flip side of feeding (or de-stacking) machines, which typically come at the head of processing line, stackers typically come at the end of the line where the processed sheets or panels are stacked up for packaging, warehousing, or delivery. Union Tool makes stackers of all sizes for many different applications. Stackers for sheets, panel boards, and plates made of wood, plastic, fiber, and metal just to name a few.

### Metal Sheet Vacuum Stacker

The Metal Sheet Vacuum stacker stacks metal sheets one at a time from an integrated conveyor system onto a lift table where an empty skid sits. As the metal sheets are stacked one by one, the lift table will lower after each sheet is placed to maintain a certain stack height. Vacuum cups transfer the sheets from the conveyor to the stacking area. Air paddlers, which act as a squaring mechanism, will keep the sheets square and aligned.



**Metal Sheet Vacuum Stacker**



**Dual Station Stacker**

### Dual Station Stacker

This dual station stacker stacks metal blanks as they come from a coil-fed blanking press, loading an operator-designated number of blanks onto each of two stacking carts. This is a continuous stacking unit, when the first cart is filled, the machine automatically switches over to filling the second cart.

### Drop-leaf Stacker

The Union Drop-leaf stacker is designed to stack laminated wood panels at the end of a processing line. This stacker incorporates a pinch roll assembly to drive the panel over a built in hydraulic lift table before lowering the panel down to the lift. The panel is supported on both side edges as it is being powered over the lift table. The side support rails are mounted to air cylinders, which open the rails to allow the panel to float down to the lift. Adjustable side guides and backstops are also included.



**Drop-leaf Stacker**

**NOTE:** Guards are removed on certain pictures for illustrative purposes only.



## Automatic Conveyor Lines:

Moving work pieces down a production line, or processing line, typically involves conveyors of one description or another. Union Tool has made a specialty of conveyoring flat panels, sheets, plates, and boards for multiple types of applications. Beyond straight conveyor line sections - which Union Tool provides in all varieties from skate wheels to motorized belts - we also provide automatic or automated conveyor line elements that turn, change flow direction, auto-return, buffer, and accumulate. In addition, many of our machines include in-feed and out-feed conveyors as either standard features or optional accessories. Here are a few samples of the types of conveyors Union Tool manufactures:

### Powered Layup Conveyor

A powered roller layup conveyor that can be used to layup a constructed panel and transport substrates to one processing system to another. This type of conveyor has been an intricate part in Union Tool's Engineered Flooring Lamination System as it is used to transfer core wood planks from our hot melt roller coater to our multi nip rotary laminator.



**Powered Layup Conveyor**

### Powered Belt Transfer Conveyor

Another type of conveyor Union Tool has designed is our powered belt transfer conveyor. This type of conveyor has been used in a variety of different applications. It includes a heavy duty belt that will transport flat substrate materials from one processing system to another with ease. A fractional AC drive will provide variable speed from 30-100 L.F.P.M. The belt type is dependent upon the application. In many cases, Teflon, Nitrile, PVC, SBR rubber belts are used and can include different pattern textures and durometers.



**Powered Belt Transfer Conveyor**



**Powered Belt Transfer Conveyor**

**NOTE:** Guards are removed on certain pictures for illustrative purposes only.



## INDUSTRIES SERVED:

### ROLLER COATERS FOR LUBRICANTS AND DRAWING COMPOUNDS

The metalworking industry has found that Union Tool roller coaters reduce costs while improving efficiency through more precise application of lubricants and drawing compounds. In addition to saving up to 50% on lubricant costs, UT coaters can offer lower direct labor and maintenance costs when compared to conventional brush or spray methods.



*Drawing compound coater with return feed option eliminates offbearing labor. The return feed conveyor can be adapted to any Union Tool roller coater.*



*Drawing compound coater specifically designed to fit between columns of a transfer press. It will accept various sizes of stock parts.*

### ROLLER COATERS FOR FOAM FABRICATION AND BEDDING MANUFACTURING

Throughout the years the Union Tool Corporation has designed many different roller coating machines for a variety of different foam fabrication and bedding applications. These applications have included (but are not limited to): Furniture, bedding, protective packaging, filters, wall padding, automotive, and many others.



*A smaller series 5 roller coater designed to apply a water-based adhesive to the top side of foam padded automotive parts.*



*Our series 45 machine designed to roller coat waterbased adhesive to the top side of foam mattress pads.*



## INDUSTRIES SERVED:

### ROLLER COATERS FOR ARCHITECTURAL (Spandrel) GLASS

The production of spandrel glass is a special purpose application of Union Tool's roller coating technology. The extremely smooth coating of ceramic frit, UV paint, and other solvent or water-base paints on glass substrates is a characteristic of UT's reverse roller coater action that gives better results than spray, curtain coater, or silk screen methods.



*Union Tool's Reverse Glass Roller Coater*

### ROLLER COATERS FOR PLASTIC PACKAGING AND FORMING

From applications of blister/skin pack material to silicone coating of plastic web materials prior to forming, Union Tool offers specific roller coaters for each process.



*Our plastic web roller coater draws web-feed (or roll -fed) plastic material from an integrated un-winder, coats it single or double sided with a silicone, anti-fog, or anti-static coating, then feeds it into a thermoforming press line.*



## INDUSTRIES SERVED:

# HOT MELT ROLLER COATERS FOR THE (RV), MOBILE HOME, FIFTH-WHEEL TOWABLES MANUFACTURING

Making wall, ceiling, and floor panels with lower labor costs and less waste is putting a bit of profit back in the bottom line for builders of recreational vehicles, mobil homes, fifth-wheel towables, and manufactured housing. Here are some of the machines that we offer that have made this possible:



*Union Tool's Series #15, Model A, 54" Hot Melt Roller Coater. A double-sided hot melt roller coater that is designed to apply hot melt (PUR) adhesive to both the top side and bottom side of RV Materials.*



*Union Tool's Dual Head Series #15, Model A/D, 54" Hot Melt Roller Coater. A double-sided hot melt roller coater that, with a flip of a switch, can be used as a single side coater without any downtime. This is one of our most popular machines used in the RV Industry today.*



*Our big Series #55, 120" Rotary Laminator is used to laminate RV sidewall panels after they are constructed.*



*Our Series #65 Hot Melt Roller Coater is used in the RV Industry and can be built as a Model A (Double-Sided) machine, a Model C (Single -Sided) machine, or a Model A/D Machine.*



## INDUSTRIES SERVED:

# ROLLER COATERS AND LAMINATORS FOR THE DOOR INDUSTRY

Union tool roller coaters and laminators are ideally suited for door construction applications. Like wall panels in the RV Industry, doors are typically sandwich constructions - a frame or core covered with various types of facing panels front and back. Typical door applications include:

- Residential Garage Doors
- Commercial Garage Doors
- Entry Doors
- Exterior Doors
- Custom Doors



*Our most popular roller coater used in the door industry is our Union Series #15, Model A- Hot Melt Roller Coater*



*Our Series 15, multi-nip rotary laminator is used to exert pressure to bond all constructed door panels together.*

## EQUIPMENT FOR EPS FOAM MANUFACTURERS

The EPS Foam Industry is one of our bigger industries we serve. The machines we produce for this industry include hot melt roller coaters, hot roll laminators, feeders, and stackers. A special machine, which has provided a big benefit for our EPS customers, is our Union Hot Melt Roller Coater/ Hot Roll Laminator Combination Machine.



Union Tool's Hot Melt Roller Coater/ Hot Roll Laminator Combination Machine is an all-in-one type of machine. This machine combines the use of a hot melt roller coater, to apply hot melt adhesives, and a hot roll laminator, to laminate adhesive backed films, all under one framework machine.

By combining these two different laminating processes, the production floor space is greatly reduced and labor savings can be achieved, which provides reduced equipment and operation costs for Union Tool Customers.



## INDUSTRIES SERVED:

# COMPLETE SYSTEM LINES FOR ENGINEERED FLOORING

Engineered flooring is used as an alternative to hardwood flooring. We have developed a full line lamination system that is used in producing engineered flooring. Our system consists of the following pieces of equipment:

### **Union Core Feeder (Dual Lane):**

This core feeder is designed to automatically feed two stacks of plywood cores up to 12" wide into our Union Hot Melt Roller Coater (single lane core feeders also available).

### **Union Hot Melt Roller Coater:**

Union Tool's Hot Melt Roller Coater for the Engineered Wood Flooring Industry is specifically designed to apply hot melt (PUR) adhesive to the top surface of plywood core planks. Once the coated planks exit through the Hot Melt Roller Coater, they will then go onto the Union Lay-Up Conveyor where at that time top wear layer lamellas may be manually placed onto each coated plank.

### **Union Lay-Up Conveyor:**

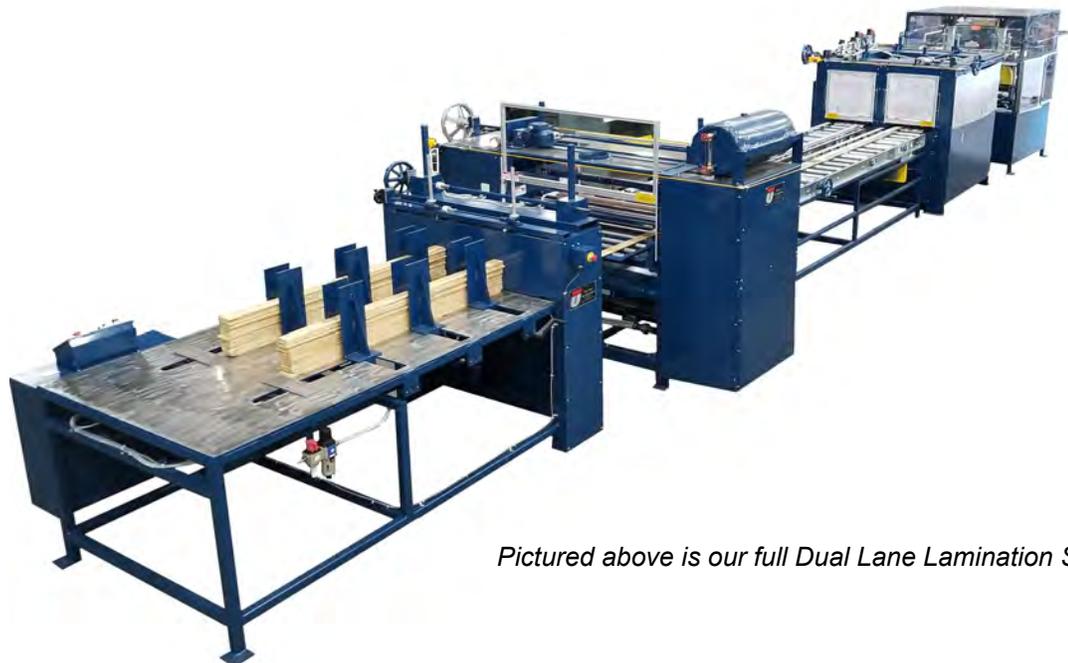
Union Tool offers a Lay-Up Conveyor that is designed to align and transport the coated planks and top lamellas from the Union Hot Melt Roller Coater to the Union Multi Nip Rotary Laminator (both single and dual lanes are available).

### **Union Multi Nip Rotary Laminator:**

This Union Multi Nip Rotary Laminator is designed to apply the necessary pressure to bond both the coated planks and top lamellas together. Union Tool offers several different styles of multi nip rotary laminators all dependent on each customer's specific needs (both single and dual lanes are available).

### **Union Flying Cutoff Saw:**

The Union Flying Cutoff Saw is incorporated into our engineered wood flooring lamination system to automatically cut laminated engineered flooring planks as they exit the Union Multi Nip Rotary Laminator. The Union Flying Cutoff Saw allows for continuous lamination at speeds up to 60 feet per minute. With incorporating dual photo sensors, the saw will detect a gap in the top lamella layer that was created by the operator at the layup station placing the lamella onto the coated surface of the core. In a smooth downward motion, the saw will make a cut when each gap is detected. Both single lane and dual lane saws are available.

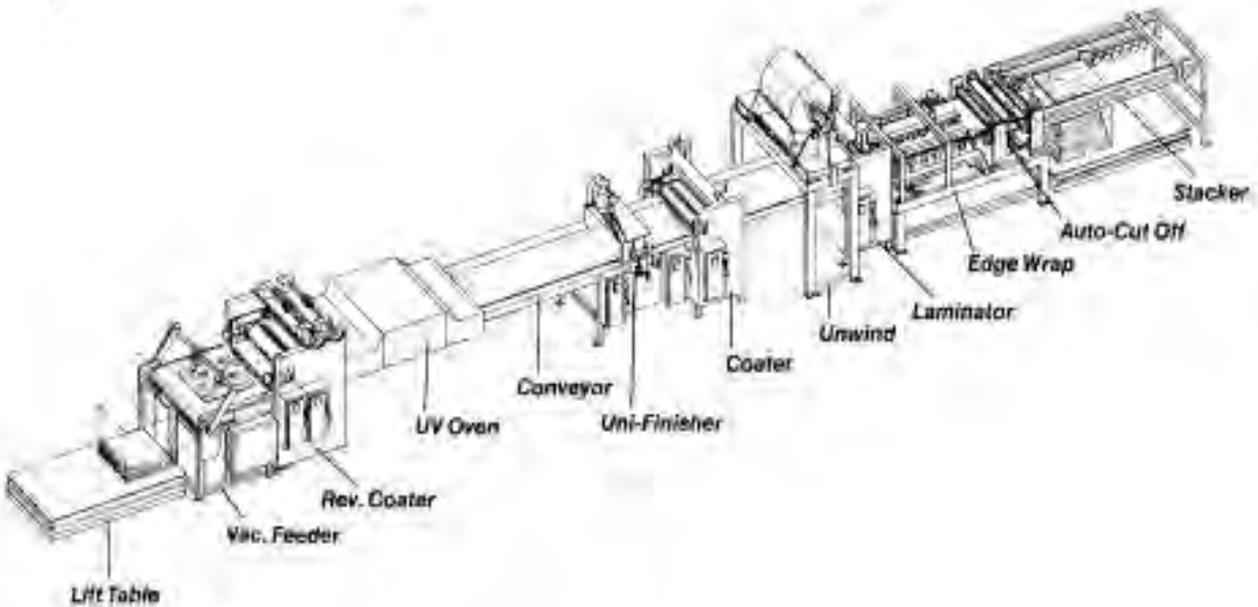


*Pictured above is our full Dual Lane Lamination System*



## COMPLETE MATERIAL HANDLING AND COATING SYSTEMS

Union Tool offers electrical and electronic programmable machine controllers and flow control for conveyORIZED sheet and panel production lines. We also offer specialty automated machines for custom applications, from foam scrap disposal to complete, multi-machine systems. Here are some examples:



The illustration above shows a dozen Union Tool machines configured as a self-contained production line. All of the elements share the same pass line height, and are electrically connected so the entire line runs as a complete unit. Using flow control conveyor sections, Union Tool can not only link various processes together into a fully automated production line, but can do so making the most efficient use of your existing plant floor. If you have existing machines that you'd like to incorporate, we can design your new line around them. If you're building a new line from scratch, we can engineer a complete Union Tool Solution from head to toe.



# FEATURES AND OPTIONS

## SAFETY FEATURES

### Protective Guards (A)

Guards are supplied as standard equipment on all units. Infeed and outfeed window guards provide protection from the coating head assembly. All chain drives are guarded as well.

### Safety Reversing Control (B)

The safety reversing control is a standard feature designed to stop/ reverse passline travel in the event of an emergency. Exerting light pressure on the safety control cable activates a reversing drum switch.



## SET UP/MAINTENANCE FEATURES

### Spring-Loaded Rolls (D)

This feature prevents damage on journal of rolls. If a foreign object enters between rolls (wider than the opening allows for), the rolls immediately spring back to release the object. All rolls are mounted in self-aligning bearings that are sealed for life.

### Seal Plates (E)

All models have easily removable seal plates for simplified cleaning.

### Spring Loaded Seal Assembly (F)

All seal plates are designed with a spring loaded assembly. By allowing the seal plates to be spring loaded, this helps to compensate for any expansion of the rolls due to heat.



## OPTIONS

### Uni-Feed (G)

This standard feature adjusts both ends of the doctor roll with a single handcrank to assure parallel rolls. Both ends move an equal distance toward or away from the coating roll to control coating film thickness.



### Air Cylinder Attachments

Optional air cylinders may be used for the doctor roll or coating roll assembly. The rolls may be retracted when the power is shut off at the end of the day. When power is turned back on, the rolls will be returned to the same setting by the air cylinders.

### Roll Opening Adjustments (H)

A single handwheel adjustment is standard on all Union Tool Roller coaters and laminators. Size of handwheels are determined off of series of machine.



## Pumping System

An optional recirculating pumping system continuously supplies coating material to the crotch of the rolls. It features an inline relief system so the amount of coating can be precisely regulated. Seal plates are designed for use with recirculating systems.

Optional infeed, offbearing and thru-conveyors save the operator time in feeding, transporting and stacking of material.

## Explosion-Proof Electricals

Optional explosion-proof electricals prevent flash fires where hazardous materials are used.

## Casters With Locking Device

Casters with a locking device are installed on each unit if requested. A foot lock is pressed to the floor to maintain stationary installation.

## Standard Features on Hot Melt Coaters

Other standard features on hot melt roller coaters include: Seven day automatic timers, glue level sensor device, over temperature control, and oil expansion tank.





## UNION TOOL: YOUR SINGLE SOURCE FOR QUALITY COATING & LAMINATING EQUIPMENT

The Union Tool Corporation is recognized throughout the industry as an innovative specialist in the roller coating field. Union Tool offers a complete line of quality built roller coating, laminating and finishing equipment to match your needs. These high production machines and complete systems eliminate costly manual labor, saving you time and money, while keeping close tolerances of film thicknesses at peak performance. Unmatched versatility allows UT coaters to fit into your production facilities as individual units or as part of a complete mass production line. Either way, Union Tool is qualified to help you develop the most profitable equipment plan for your operation.

### **CUSTOM-BUILT EQUIPMENT BY A PROFESSIONAL ENGINEERING STAFF**

Union Tool maintains a staff of highly qualified engineers specializing in the application of high efficiency, custom-built equipment for individual production situations. Many times a custom adaptation of a machine will help solve a production problem. Union Tool engineers work with you to develop a production system that best fits your application.

### **FULL SERVICE BACKUP**

All Union Tool roller coating equipment is shipped completely assembled. Field engineers work with our customers to ensure proper performance. And, to keep the machines up and running, Union Tool can provide overnight delivery service for all standard parts—to anywhere in the US and Canada.

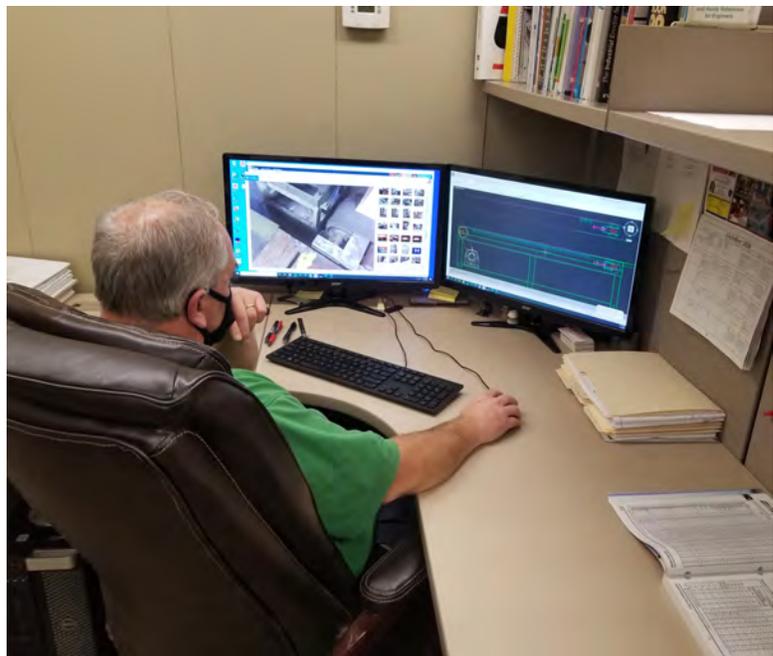
### **MACHINE RECONDITIONING SERVICE**

Before you consider replacing an older UT machine with a new one, check into our reconditioning service. We can return older equipment to like-new condition at a fraction of new equipment cost. Call Union Tool today for further details.

### **LABORATORY TESTING AT NO COST OR OBLIGATION**

We at Union Tool recognize that change is a major aspect of production processes. Therefore, in order to assure efficient, dependable operation with your production material, we invite you to take advantage of our testing facilities. By submitting your samples for tests you will be able to see the actual coating on your product, and evaluate both machine and coating. There is no cost for this service and no future obligation.

Our policy at Union Tool is to provide the extra service that makes a satisfied customer. At Union Tool, our only business is solving your production problems—we're not satisfied until you're satisfied.



*At Union Tool, computer-aided design technology is used to reduce the time and costs associated with new product development.*



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